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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/599,036	06/21/2000	Esmaell Yousefi	22-0134	7772

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EXAMINER	
LY, NGHI H	

ART UNIT	PAPER NUMBER
2686	

DATE MAILED: 03/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/599,036	YOUSEFI ET AL.	
	Examiner	Art Unit	
	Nghi H. Ly	2686	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *31 December 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *10,11,22 and 26-28* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *10,11 and 22* is/are allowed.

6)☒ Claim(s) *26-28* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 26, 27 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takahashi et al (US 6,275,518) in view of Ayerst et al (US 5,689,805).

Regarding claims 26 and 28, Takahashi teaches a variable hop cycle beam laydown (see Abstract) comprising: first cells supported by a first hop cycle (see fig.3, base station A or B with beams or in order to transmit signal, the teaching of Takahashi inherently teaches the downlink beam energy for first cells, and see column 3, lines 50-64), second cells supported by a second hop cycle different than the first hop cycle (also see column 3, lines 50-64, Takahashi teaches "frequency hopping in different

cells". Therefore, the teaching of Takahashi inherently includes second downlink beam), and transition cells supported by a transition hop cycle for transitioning between the first hop cycle and the second hop cycle (also see column 3, lines 50-64, Takahashi teaches "frequency hopping in different cells" and "a plurality of predetermined radio frequencies are hoped at regular time intervals". Therefore, the teaching of Takahashi inherently includes a transition cells, a transition downlink beam and a second cells).

Takahashi does not specifically disclose the transition hop cycle comprises downlink beam energy in a first transition cell a first percent of a time period, downlink beam energy in a second transition cell a second percent of the time period and a power gated downlink beam for a remaining percent of the time period.

Ayerst teaches the transition hop cycle comprises downlink beam energy in a first transition cell a first percent of a time period, downlink beam energy in a second transition cell a second percent of the time period and a power gated downlink beam for a remaining percent of the time period (see column 2, line 45 to column 3, line 12, column 4, lines 42 to column 5, line 11, and see fig.1, cell 2A is a "transition cell" of cells 1A and 3A, or cell 2C is a "transition cell" of cells 1C and 3C, and the amount of time spent on transmitting on cells 1A, 2A, 3A, 1C, 2C or 3C reads on applicant's "*first percent of a time period, a second percent of the time period and a remaining percent of the time period*". In addition, applicant's claims merely recite "*first percent of a time period, a second percent of the time period and a remaining percent of the time period*", but fail to further disclose how many percent. Therefore, Ayerst does indeed teach applicant's claimed limitations).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to provide the above teaching of Ayerst into the system of Takahashi in order to provide a method and apparatus for generating, identifying and acquiring spread spectrum communication signals using layered spreading and identification codes (see Harms, column 1, lines 16-19).

Regarding claim 27, Takahashi teaches a pparatus for generating a variable hop cycle beam laydown (see Abstract), the apparatus comprising: a waveform generator producing a first downlink beam, second downlink beam, and a transition downlink beam (column 3, lines 26-49, see "plurality"), at least one switch directing the first downlink beam between first feed paths to first cells (fig.8A, see "selector 52" and fig.8B, see "selector 58"), directing the second downlink beam between second feed paths to second cells, and directing the transition downlink beam between third feed paths to transition cells (column 3, lines 26-49, see "plurality"), at least one feed path selection input coupled to the at least one switch (fig.8A, see "selector 52" and fig.8B, see "selector 58") and a power gating circuit coupled to the waveform generator for gating power in the transition downlink beam (see fig.8A, fig.8B, fig.11A and fig.11B) and a memory for storing downlink beam type definitions that direct the feed path selection input to control the switch according to a first hop cycle, a second hop cycle different than the first hop cycle, and a transition hop cycle (see column 3, lines 35-44 and see column 3, line 65 to column 4, line 9. In order to "*repeat the same hopping frequency or to skip one hopping frequency to hop to the next but one hopping*

frequency at the next hopping timing", the teaching of Takahashi inherently teaches applicant's "a memory for storing downlink beam").

Takahashi does not specifically disclose the transition hop cycle specifies transmission of downlink beam energy in a first transition cell a first percent of a time period, specifies downlink beam energy in a second transition cell a second percent of the time period, and specified a power gated downlink transition beam a remaining percent of the time period.

Ayerst teaches the transition hop cycle specifies transmission of downlink beam energy in a first transition cell a first percent of a time period, specifies downlink beam energy in a second transition cell a second percent of the time period and specified a power gated downlink transition beam a remaining percent of the time period (see column 2, line 45 to column 3, line 12, column 4, lines 42 to column 5, line 11, and see fig.1, cell 2A is a "transition cell" of cells 1A and 3A, or cell 2C is a "transition cell" of cells 1C and 3C, and the amount of time spent on transmitting on cells 1A, 2A, 3A, 1C, 2C or 3C reads on applicant's "*first percent of a time period, a second percent of the time period and a remaining percent of the time period*". In addition, applicant's claims merely recite "*first percent of a time period, a second percent of the time period and a remaining percent of the time period*", but fail to further disclose how many percent. Therefore, Ayerst does indeed teach applicant's claimed limitations).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to provide the above teaching of Ayerst into the system of Takahashi in order to provide a method and apparatus for generating, identifying and

acquiring spread spectrum communication signals using layered spreading and identification codes (see Harms, column 1, lines 16-19).

Allowable Subject Matter

4. Claims 10, 11 and 22 are allowed.

The following is a statement of reasons for the indication of allowable subject matter:

Claims 10, 11 and 22 are allowable over the prior art of record for the reasons as stated in the Office action dated 06/16/05 (pages 11-12).

Response to Arguments

5. Applicant's arguments with respect to claim 26 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nghi H. Ly whose telephone number is (571) 272-7911. The examiner can normally be reached on 8:30 am-5:30 pm Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha Banks-Harold can be reached on (571) 272-7905. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Nghi H. Ly

03/16/06

Marsha D Banks-Harold

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